City of Auburn Median Design & Maintenance Guidelines

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1. What is a Median?

In its most basic form and function the median is a raised surface landscaped with softscape or hardscape and located in the roadway between two opposing directions of travel.

While medians appear to be rather unremarkable street features, they are an important asset for aesthetic, environmental, and mobility purposes.

Specifically, medians:

Beautify the street with attractive landscaping;



Establish a sense of and/or serve as a gateway to a community;



Absorb stormwater and decrease the burden on existing storm drainage;



- Improve air quality; Provide a mid-block refuge for pedestrians crossing streets; and



Calm traffic speeds by creating a narrower-feeling street.

2. Glossary of Terms

Bioswale: Landscape features that filter and/or impound stormwater

Concrete maintenance strip: An area around the perimeter of the landscaped portion of a median providing safe access to the median for maintenance workers

Hardscape: Landscape features that are non-vegetative in nature, such as pavers, stones, and monument signs

Landscape: May consist of hardscapes, softscapes, or any combination thereof

Median: A raised surface landscaped with softscape or hardscape and located in the roadway between two opposing directions of travel

Mid-block crossing: A pedestrian crossing not located at roadway intersections

Native species: Plant species native to the Puget Sound lowland region of the Pacific Northwest or noninvasive species that have adapted to the climatic conditions of the region

Performance assurance device: A bond or similar financial agreement held by the City until the median landscaping has been satisfactorily installed and maintained for one year after acceptance of the project

Shy distance: The setback between the median curb and lane line of the roadway

Softscape: Landscape features that are vegetative in nature, such as trees, shrubs, and groundcover

3. Purpose of Design and Maintenance Guidelines

Medians are located throughout the City, whether constructed as part of the City's capital projects or as required street improvements for development. The City's Parks, Arts, and Recreation Department is currently responsible for maintenance of 14 medians.

Median standards are addressed in Section 10.15.1 of the City of Auburn Engineering Design Standards. The goal for the design and maintenance guidelines contained herein is not to replace those standards, but to serve as an easy-to-reference, supplementary guide that illustrates median design options and maintenance practices in light of the City's existing standards.

The design and maintenance guidelines in the following chapters combine the City of Auburn Engineering Design Standards with experiences from the City and other municipalities. Each guideline is a component of design and/or maintenance that needs to be addressed by the City or private developer when improving current medians or constructing new medians within the City.

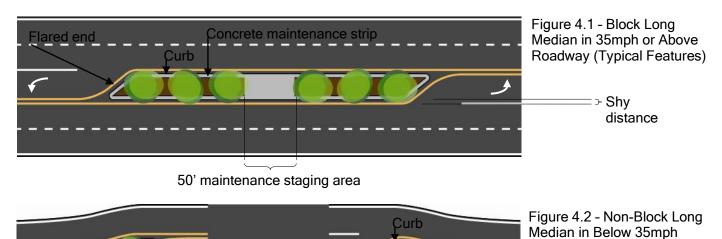
4. Design Guidelines

Dimensions

Feature	Guideline
Width ¹ (for hardscapes)	4' min.
Width ¹ (for softscapes)	8' min.
Width ¹ (for bioswales)	See City of Auburn Surface Water Management Manual (SWMM) Volume V, Chapter 7 and consult with Public Works Department at (253) 931-3010
Concrete maintenance strip width ²	1'
Paved maintenance staging area ³	50' with mountable curbs
Curb⁴ height	Consistent with curbs in vicinity, typically 6"
Shy distance	1' min.
Median ends	Flared to allow for transitioning traffic

¹Median width is measured from inside edge of curb to inside edge of curb.

Flared end



distance

Roadway (Typical Features)
Shy

²Required only for softscaped medians located in roadways with a speed limit of 35mph or above.

³Required only for softscaped medians located in roadways with a speed limit of 35mph or above and running the length of an entire block.

⁴For bioswale curb design, see City of Auburn Surface Water Management Manual (SWMM) Volume V, Chapter 7 and consult with Public Works Department at (253) 931-3010.

Landscaping

Hardscaping	
Applicability	 Lower cost (than softscaping) solution needed Success of vegetation impeded by location and/or lack of irrigation systems Roadway width is insufficient for 8' median Vegetation creates traffic and/or sight distance hazard Vegetation conflicts with utilities Location is especially suited for community identity features (ex. monument signs/stones and public art)

Figure 4.3(a-b) - Median Hardscape Examples

(Top) Public art and a monument sign work together to establish community identity for this City of Lacey median.

(Bottom) Stamped concrete leaves decorate an otherwise unmemorable traffic circle in the City of Seattle.

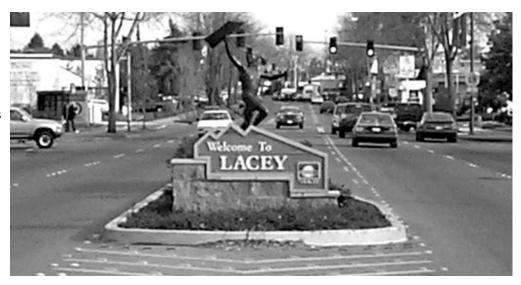






Figure 4.3(c) - Median Hardscape Examples

River rock bookend softscaping in this median from the City of Pleasant Hill.

Coffeening	
Softscaping	
	Higher budget (than hardscaping) solution is available
	Location is without vegetation in its surroundings
	Stormwater runoff reduction is highly desired
	Irrigation system is able to be installed to aid
	vegetation success
Applicability	Sufficient sunlight and moist soil is available
	Roadway width is sufficient for 8' median
	 Vegetation (canopy shape of trees, size/type of
	leaves, and root shape) creates no traffic and/or sight
	distance hazard, does not conflict with utilities, and
	does not damage street facilities as it matures
	Combination of tree, shrubs, and groundcover. Trees are
Plant types	required for principal arterials, minor arterials, non-residential
	collectors, and local non-residential streets.
	Generally: 50% min. native to the Puget Sound lowland
	region of the Pacific Northwest or noninvasive species that
	have adapted to the climatic conditions of the region. See
	City of Auburn Engineering Design Standards 10.08.06 for
	plant species selection considerations.
	Trace: Needled evergroops are prohibited upless median is
	<u>Trees:</u> Needled evergreens are prohibited unless median is significantly wider than mature spread of the tree. See City of
	Auburn Engineering Design Standards Table 10-5 for
Plant species	recommended tree species.
	recommended nee species.
	Shrubs: City or developer's discretion.
	Chirabo. Only of developer 5 discretion.
	Groundcover: Consult with Parks Department at (253) 931-
	3027 for approval of specific groundcover species.
	gramma spanna
	Grass: Sodded lawn and seed lawn are prohibited for any
	portion of the softscape design.
	Trees: Min. 2" caliper, 2' above root ball. Max. height at
	maturity depends on median width (25' if in proximity to utility
	wires); see City of Auburn Engineering Design Standards
	10.08.5. Min. 7' at time of planting. Min. 14' of clearance
Plant sizes	above roadways must be maintained at maturity.
	Shrubs: Min. 1 gallon at planting. Max. 3' tall at maturity.
	0 1 14 17 14 01 11 11 11
	Groundcover: Min. 4" pots. Max. 3' tall at maturity.
	Trees: Depends on spread. Distance from center of tree to a
	streetlight must be min. 20' and ≥ ½ mature spread width.
	Chruba: City or dayalanar's discretion, as annuariate for
Plant spacing	Shrubs: City or developer's discretion, as appropriate for
The second	species.
	Groundcover: City or developer's discretion, as appropriate
	for species.
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Figure 4.4(a-c) - Median Softscape Examples

(Top) Shy distance maintained and concrete strips allow for safe maintenance access to the vegetation in this City of Olympia median.

(Middle) Trees in this New York City median are the only noticeable green features in the median's immediate surroundings.

(Bottom) A lush mixture of trees, shrubs, and groundcover nevertheless provide the necessary clearance for the roadway.

Other Features

Feature	Applicability
Bioswale	Encouraged, if feasible, due to stormwater filtering and/or storage capabilities. See City of Auburn Surface Water Management Manual (SWMM) Volume V, Chapter 7 and consult with Public Works Department at (253) 931-3010.
Pedestrian crossing	Encouraged, if feasible, due to increased pedestrian mobility by allowing mid-block crossings on highly trafficked streets. See City of Auburn Engineering Design Standards Section 10.02.9.5(6), 10.15.5, 10.15.5.1, and consult with Public Works Department at (253) 931-3010.
Irrigation	Required for high-visibility medians. Consult with Parks Department at (253) 931-3027 for applicability and Public Works Department at (253) 931-3010 for design.
Illumination (Street Lighting)	Required (dual arm posts) for medians ≥ 8' wide. See City of Auburn Engineering Design Standards Section 10.10 for min. light level requirements.
Root direction device	Required for all medians with trees, to deflect roots downward into the soil, away from adjacent roadway. Consult with Public Works Department at (253) 931-3010 for exceptions.

5. Maintenance Guidelines

The City's Parks, Arts, and Recreation Department is responsible for maintaining 14 medians in the ROW. The following components are required as part of the maintenance plan for any new median constructed within the City:

Maintenance Standards Applicability - Hardscapes

• Litter control (per month)

Applicability - Softscapes

- Litter control (per month)
- Weed control (per month)
- Pre-emergent weed control schedule
- Pruning schedule
- Leaf removal schedule
- Irrigation schedule and method
- Adding bark (when new plants installed)

Maintenance Responsibility and Assurance Device

Maintenance of the median shall be the sole responsibility of the contractor for one year after acceptance of the project, and a performance assurance device is required.